REMARKS

In response to the Office Action mailed on February 21, 2007, Applicants respectfully request reconsideration. To further the prosecution of this Application, Applicants submit the following remarks discussing patentability of rejected claims and add new claims 46-51. Applicants respectfully request that the application be passed to issue.

Claims 1-45 were previously pending in the subject Application. Claims 46-51 are being added by way of this amendment. Claims 22 and 32 are being cancelled. Thus, after entry of this Amendment and changes to claims as indicated above, claims 1-21, 23-31, and 33-51 will be pending. No new matter was added to the application when amending or adding these claims.

Rejection of Claim 1 under 35 U.S.C. § 103(a)

The Examiner has rejected original claim 1 under 35 U.S.C. § 102(a) based on a combination of teachings found in Casey (U.S. Patent 6,205,488) and Giniger (U.S. Patent 6,751,729). Applicants are appreciative of the Examiner's review of claim 1 and respectfully request further consideration of same in view of the following discussion pointing out why claim 1 is unique and non-obvious over the cited prior art.

Claim 1 reads as follows:

1. (Original) In a first node of a physical network supporting multiple virtual network connections, a method to dynamically modify configuration data supporting virtual networks, the method comprising:

receiving i) network address information associated with at least one host computer, and ii) a corresponding gateway identifier of a gateway in the physical network;

generating a notification message including the network address information and the corresponding gateway identifier; and

transmitting the notification message to a second node of the physical network enabling the second node to establish a virtual network connection between the second node and the first node on which to forward data messages to the at least one host computer based on the corresponding gateway identifier.

The Examiner asserts that Casey discloses elements of "generating a notification message including the network address information and the corresponding gateway identifier; and transmitting the notification message to a second node of the physical network enabling the second node to establish a virtual network connection between the second node and the first node on which to forward data messages to the at least one host computer based on the corresponding gateway identifier."

Applicants respectfully disagree with this assertion. The cited passage in Casey reads as follows:

> When a hello adjacency is registered, the relevant VR proceeds to initiate an LDP session with its peer. One of the two VRs will initiate a TCP connection to the other. The IP source and destination addresses used here are the base network IP addresses of the respective VBRs 10. After the TCP connection is in place, and the necessary initiation messages have been exchanged, then an LDP session between the peer VRs exists. The LDP session is established and the two VRs offer each other a label for a LSP tunnel to itself. The peer VR will store this in a forwarding table as the nested label 40 (i.e. the first label to be pushed on the label stack) for the destination VR. This nested label 40 does not include any labels for intermediate hops required to traverse the MPLS network. As far as the VRs are concerned, this LSP tunnel is a single hop to its peer. This label is referred to as the peer label or nested tunnel label. (emphasis added)

Presumably, the Examiner likens the label for the LSP tunnel to the network address of the gateway in the claimed invention. Applicants contend that a label for a tunnel is not equivalent to a network address associated with a gateway. A gateway provides a different function than a tunnel. For example, a gateway is a point in a network providing selective access to other nodes in a network, whereas a tunnel refers to a way of encapsulating data for transmission through multiple network nodes. Thus, they both provide different types of functions and are not equivalents.

Additionally, at most, Casey discloses that two VRs exchange tunnel labels with each other; there is no indication whatsoever that this exchange of tunnel labels also includes network address information associated with a host computer that uses the tunnel to communicate over a network. Thus, the claim limitation of providing network address information in the exchange is missing in Casey. The assertion in the office action is therefore incorrect. That is, Casey does not disclose generating or transmitting a notification message including network address information and a corresponding gateway identifier.

Providing the combination (e.g., network address information and the corresponding gateway identifier) enables a receiving node (e.g., the second node as in the claimed invention) to identify which gateway on which to forward messages to the host computer. As indicated above, the cited passage provides no indication whatsoever that the VRs exchange a combination of this information, nor that the VRs provide each other with network address information of host computers that use the tunnels in Casey. Accordingly, contrary to the assertion set forth in the office action, the Casey reference does not teach or suggest portions of the claimed invention.

Additionally, the Examiner asserts that Giniger discloses the element of "receiving i) network address information associated with at least one host computer, and ii) a corresponding gateway identifier of a gateway in the physical network" and that a combination of Casey and Giniger teaches or suggests the claimed invention.

Applicants respectfully disagree with this assertion. The cited passage in Giniger at column 5 lines 44-49 reads as follows:

> The method for configuring and authenticating a node device can further include, prior to sending the authentication chain to the server, accepting an identification for the server and an address on the data network of the server to which the authentication chain is sent. (emphasis added)

This cited prior art is directed to receipt of a network address associated with a server for purposes of authenticating a server. In contradistinction, the claimed invention is directed toward dissemination of configuration data, namely, network address information of at least one host computer and a corresponding gateway identifier of a gateway in a network. The cited passage recites only "acceptance" of an address of the server. Thus, contrary to the office action's assertion, there is no indication whatsoever of receiving a combination of network address information associated with at least one host computer and a corresponding gateway identifier as in the claimed invention.

Accordingly, the combination of Giniger and Casey to reject the claimed invention does not make sense, nor does it recite all of the claim limitations.

Additionally, The Examiner asserts that Giniger discloses a motivation to combine the Casey reference and the Giniger reference. For example, the Examiner indicates that Giniger states in column 1:

> An important impetus for the adoption of VPN technology by businesses is the significant cost saving associated with the replacement of expensive remote access servers and associated long distance dial-up charges, the substitution of inexpensive and ubiquitous Internet access for expensive leased lines and frame relay access, and the

introduction of a flexible, fast, secure, and inexpensive mechanism for exchanging data with suppliers and customers. (emphasis added)

Although there may be an impetus to use VPN technology for cost savings purposes, Applicants respectfully submit that this statement touting VPN technology is also not suggestive of the novel approach submitted by the Applicants to carry out dissemination of configuration information including network address information associated with at least one host computer and corresponding gateway identifier as recited by claim 1. In other words, the claimed invention is not unpatentable because it is directed towards useful subject matter such as VPN technology. Instead, the claimed invention is patentable because it recites a useful, novel and non-obvious way to carry out novel communication technology.

For example, the claimed invention enables dissemination of a notification message (e.g., including security gateway information and corresponding network address information) to other nodes such as customer facility locations. The corresponding security gateway identifier indicates the endpoint or termination point of that secure connection through which communications must pass in order to communicate with those host computers that have addresses that match the network address information. As such, when embodiments of the invention disseminate this notification information to remotely located nodes, such nodes can use this information to establish a connection to the gateway as specified by the gateway identifier when any communications (e.g., packets) are destined for a host computer as specified by the network address information.

Based on the aforementioned remarks, Applicants respectfully submit that the invention as recited in now amended claim 1 is neither anticipated nor obvious because it includes a unique and useful configuration not taught or suggested by the cited references. Thus, in view of the foregoing discussion, Applicants submit that claim 1 is patentably distinct and advantageous over the cited prior art, and the obviousness

rejection should be withdrawn. Accordingly, Applicants respectfully request allowance of claim 1 and, by virtue of dependency, allowance of corresponding dependent claims 2-10.

Claim 11 includes similar limitations as claim 1, except in apparatus/system form. For similar reasons as discussed above, Applicants respectfully submit that claim 11 and corresponding dependent claims 12-20 are in condition for allowance as well.

Applicants respectfully submit that claims 41 and 42 are in condition for allowance for applicable reasons as discussed above for claim 1.

Applicants respectfully submit that each of dependent claims 2-10 include further patentable distinctions over the cited prior art as well.

For example, with respect to claim 2, the cited passage discusses distribution of virtual private network information. However, there is no indication of disseminating both network address information and a corresponding gateway identifier value, especially not as an appendix to a notification message. Accordingly, Applicants respectfully request allowance of claim 2.

With respect to claim 6, neither reference teaches or suggests delivery of the notification message to multiple customer edge nodes nor that the customer edge nodes update their corresponding configuration data in a way as specified by claim 6.

With respect to claim 7, neither reference teaches or suggests that customer edge nodes deliver a notification message with network address information and a corresponding gateway identifier value to another customer edge node as in the claimed invention.

Applicants have amended claim 21 to include the limitations of claim 22. Claim 22 is being canceled.

Amended claim 21 recites "receiving a notification message from a sending node of the physical network, the notification message including network address information and a corresponding gateway identifier of a gateway of the physical network; and based on contents of the notification message, modifying a map at the receiving node to include the network address information and configuration data identifying at least part of a virtual network connection between the receiving node and the sending node on which to forward data messages through the gateway to a destination node."

The office action cites the same passages as mentioned above to reject the claimed invention as recited by amended claim 21. Applicants reiterate that neither Casey nor Giniger disclose or suggest receiving a notification message including network address information and a corresponding gateway identifier.

Additionally, amended claim 21 recites "modifying a map at the receiving node to include the network address information and configuration data identifying at least part of a virtual network connection between the receiving node and the sending node on which to forward data messages through the gateway to a destination node." Applicants respectfully disagree that Casey teaches or suggests this claim limitation.

More specifically, the office action likens this claim limitation to Casey at column 3, lines 38-54, which reads as follows:

> The provider determined routing regime determines routes within the MPLS domain and then, as per normal MPLS operation, Label Distribution Protocol is invoked to establish implicit LSPs across the MPLS domain which include the intermediate hops required to get from one VBR 10 to another VBR 10. FIG. 2 illustrates the label switched path tree terminating on a VBR 10. The full mesh is realized by label switched path trees

terminating on all VBRs 10. The result is a full mesh of LSPs between all LSRs 20 and VBRs 10. (i.e. in each LSR and VBR there is a Forwarding Equivalence Class (FEC) to next hop label map that has an entry in it for every other LSR and VBR for the first hop of an LSP to that VBR. This defines the base tunnel mesh). These first hop labels in the FEC map are referred to as base labels. They will be used as the top of stack labels for all inter VBR traffic. Base labels will be swapped at each LSR 20 on the path to the destination VBR 10. (emphasis added)

This cited passage does not cure the deficiency. For example, there is no indication that the "next hop" label mapping as discussed above includes network address information associated with a corresponding gateway identifier. Accordingly, Applicants respectfully request allowance of claim 21. By virtue of dependency, Applicants submit that claims 23-30 are in allowable condition as well, each of which include further patentable distinction over the cited prior art.

Claim 31 has been amended to include the limitations of claim 32. For similar reasons as discussed above, claim 31 and corresponding dependent claims are in condition for allowance.

Applicants respectfully submit that amended claims 43 and 44 are in condition for allowance for applicable reasons as discussed above for claim 21.

Applicants respectfully submit that amended claims 45 is in condition for allowance for applicable reasons as discussed above.

New Claims 46-51

Support for claims 46-51 can be found in figures 1-4 and corresponding text as well as elsewhere throughout the application.

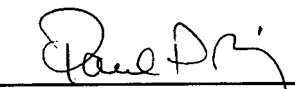
CONCLUSION

In view of the foregoing remarks, Applicants submit that the pending claims as well as newly added claims are in condition for allowance. A Notice to this affect is respectfully requested. If the Examiner believes, after reviewing this Response, that the pending claims are not in condition for allowance, the Examiner is respectfully requested to call the Applicant(s) Representative at the number below.

If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-0901.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned Attorney at (508) 616-9660, in Westborough, Massachusetts.

Respectfully submitted,



Paul P. Kriz, Esq.
Attorney for Applicant(s)
Registration No.: 45,752
CHAPIN IP LAW, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, Massachusetts 01581
Telephone: (508) 616-9660
Facsimile: (508) 616-9661

Attorney Docket No.: CIS03-34(7598)
Dated: June 21, 2007